IN THE SPECIFICATION:

Please amend paragraph [0014] of the specification *as published* as follows:

[0014] The task of the invention is thus to provide a process for analysis of correspondences in image data sets and a device suitable for carrying out this process, which efficiently uses computational resources and is capable of processing large optical flows. This task is solved by a process and a device for analysis of correspondences in image data sets <u>as set forth in the</u> <u>independent</u> ~~having the characteristics of~~ patent claims ~~1 and 11~~. Advantageous embodiments and further developments of the invention can be seen from the dependent claims.

Please amend paragraph [0015] of the specification *as published* as follows:

[0015] In the novel process for correspondence analysis in image data sets, individual image points are compared within two image data sets i 20 and j 21, in order to identify corresponding image points (pixels) u .sub.i v .sub.i and u .sub.j v .sub.j. For this, in inventive matter, in a first step the image data set i 20 is transformed with a signature operator in such a manner, that for each pixel u .sub.i v .sub.i a signature string 27 is computed and stored in a signature table 22 together with the pixel coordinates. In a special manner then, in a next step, each pixel u .sub.j v .sub.j of the other image data set j 21 is transformed by means of the same signature operator, whereupon the resulting signature strings 27 together with the respective pixel coordinates are recorded in a further signature table 23 associated with a further image data set j 21. Subsequently then, the entries in the two signature tables 22 23 are examined with respect to whether signature strings 27 exist which can be found in both tables, whereupon in these cases a correspondence hypothesis 25 is generated for coordinates associated with these data strings 27 and stored in a hypothesis list 27 for further processing. In simple manner, the correspondence hypothesis can be defined in such a way, that when corresponding signature strings 27 are found in both signature tables 22, 23, it is presumed, that the respective image points of the image pairs correspond to images of the same object or, as the case may be, parts thereof. It is immaterial for

the present invention whether, in the framework of the inventive physical form of the device for correspondence analysis, the storage capacity for storage of the signature tables 22, 23 associated with the image data sets i j physically or virtually are divided into two memory areas. In each case a unit for generation of a signature string associated correspondence hypothesis is connected downstream of this storage unit, which is provided with a memory for storage of these correspondence hypothesis 25 in the form of a hypothesis list 26[[,]].